

2019 Cooperative Summer Field Training Program

Project Title: National Synthesis of Species Responses to Climate Change

Project Scientists: Madeleine Rubenstein

USGS Center: National Climate Adaptation Science Center

Location: Reston, VA

Project Description:

Background Information:

This project will collect and analyze documented effects of climate change on fish and wildlife, with an emphasis on range shifts. As part of an effort to assess the body of evidence about range shifts in response to climate change, this project will involve working with USGS staff to conduct a systematic literature review of peer-reviewed papers; articulate and assess hypotheses related to climate change-related range shifts in terrestrial, freshwater, and marine ecosystems; and participate in a structured meta-analysis and publication process.

Objectives:

The objectives of this project are to collect documented observations of species range shift in response to climate change, and to use collected observations to refine hypotheses about climate change impacts to biodiversity.

Intern Tasks:

Interns will assist with conducting and organizing a systematic literature review; manage the collection and organization of published data; interpret peer-reviewed publications; and assist USGS scientists in interpreting and contextualizing results. This position requires excellent reading and writing skills, the ability to organize large amounts of information, and the ability to work constructively in a team with others who will also assist in this project.

Expected Outcomes:

This project will be an excellent opportunity for interns to be exposed to the process and substance of a systematic review and meta-analysis. The intern will gain experience in collecting and interpreting data from peer-reviewed journal articles, which is a highly valuable skill in the sciences and one that requires practice and mentoring. The intern will also learn how collections of empirical observations are combined and analyzed in order to rigorously assess hypotheses and advance knowledge of climate change impacts to biodiversity and ecosystems.

Details for Matching:

Type of Project: Office Work

Project Discipline: Ecology, Wildlife Biology

Project Start Date: Fri Feb 01 2019 00:00:00 GMT-0500 (EST)

Project Duration: Minimum 10 weeks, up to one year

Level of Physical Demand: Level 8-1: The work is sedentary. Typically, the employee may sit comfortably to do the work. However, there may be some walking; standing; bending; carrying of light items such as papers, books, or small parts; or driving an automobile. No special physical demands are required to perform the work.

GIS Training: ESA

Special Skills and Interests: Our preferred candidates will have some experience reading scientific publications, have a basic knowledge of climate change and ecology, and a demonstrated ability to organize information and stay detail-oriented.